

Correspondence

TO THE EDITOR, *British Journal of Venereal Diseases*

Vancomycin sensitive penicillinase producing *Neisseria gonorrhoeae*

Sir,
Since the introduction of selective antibiotic-containing media for cultural isolation of *Neisseria gonorrhoeae*,¹ vancomycin sensitive strains, which fail to grow on such media, have been reported to form 3-10% of the total isolates.²⁻⁴ We have recently studied 78 isolates from men with urethral gonorrhoea in Sheffield to determine the local prevalence of such strains.

Urethral swabs from patients were inoculated on to "split plates" consisting of non-selective and selective medium. The non-selective medium comprised Oxoid gonococcal agar base with Oxoid "Vitax" growth supplement and 10% lysed horse blood. The selective medium was similar and additionally contained VCNT antibiotic supplement (vancomycin 3 µg/ml, colistin 7.5 mg/ml, nystatin 12.5 mg/ml, trimethoprim 5 µg/ml).

Inoculated plates were incubated at 37°C in 10% CO₂ for up to 48 hours. *N gonorrhoeae* was identified by oxidase reaction, Gram stain, and carbohydrate utilisation using serum free agar slopes.

We found three of 78 (3.9%) isolates to be sensitive to vancomycin. All the patients had been infected outside Sheffield, one each in London, Scotland, and Bangkok. The isolate from the last patient was found to be resistant to 2 µg penicillin and ampicillin discs in susceptibility testing, and β-lactamase production was shown by Oxoid detection strip. The isolate was sensitive to tetracycline, erythromycin, spectinomycin, and cefuroxime as well as to vancomycin.

The increase in β-lactamase producing gonococci in the United Kingdom⁵ and more recently the emergence of such strains which are additionally resistant to spectinomycin,⁶⁻⁹ demands that the presumptive microscopic diagnosis of gonorrhoea is confirmed by subsequent cultural isolation of *N gonorrhoeae* and antimicrobial sensitivity testing to facilitate their epidemiological monitoring. That β-lactamase producing organisms may also be vancomycin sensitive gives additional support to those workers who suggest that both selective and non-selective media should be

inoculated in parallel for the primary isolation of *N gonorrhoeae*.²

Yours faithfully,

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References

1. Thayer JD, Martin JE. Improved medium selective for cultivation of *N gonorrhoeae* and *N meningitidis*. *Publ Health Rep* 1966; 81:559-62.
2. Reyn A, Bentzon MW. Comparison of a selective and a non-selective medium in the diagnosis of gonorrhoea to ascertain the sensitivity of *N gonorrhoeae* to vancomycin. *Br J Vener Dis* 1972; 48:363-8.
3. Phillips I, Humphrey D, Middleton A, Nicol CS. Diagnosis of gonorrhoea by culture on a selective medium containing vancomycin, colistin, nystatin and trimethoprim (VCNT). *Br J Vener Dis* 1972; 48:287-92.
4. Windall JJ, Hall MM, Washington JA, Douglas TJ, Weed LA. Inhibitory effects on *Neisseria gonorrhoeae* in Thayer Martin medium. *J Infect Dis* 1980; 142:775.
5. McCutchan JA, Adler MW, Berrie JRH. Penicillinase producing *Neisseria gonorrhoeae* in Great Britain 1977-81: alarming increase in incidence and recent development of endemic transmission. *Br Med J* 1982; 285:337-40.
6. Ashford WA, Adams HJU, Johnson SR *et al*. Spectinomycin resistant penicillinase producing *Neisseria gonorrhoeae*. *Lancet* 1981; ii: 1035-7.
7. Easmon CSF, Ison CA, Bellinger CM, Harris JRW. Emergence of resistance after spectinomycin treatment for gonorrhoea due to β-lactamase producing strain of *Neisseria gonorrhoeae*. *Br Med J* 1982; 284:1604-5.
8. Anonymous. Spectinomycin resistant β-lactamase producing *Neisseria gonorrhoeae*. *Communicable Disease Report* 82/31. 1. London: Public Health Laboratory Service, 1982.
9. Anonymous. Spectinomycin resistant β-lactamase producing *Neisseria gonorrhoeae*. *Communicable Disease Report* 82/37. 4. London: Public Health Laboratory Service, 1982.

TO THE EDITOR, *British Journal of Venereal Diseases*

Hepatitis B virus infections in homosexual men

Sir,

We were interested to know if the incidence of hepatitis B infection in homosexual men in a provincial genitourinary clinic was similar to that seen in the London area.¹ From January 1980 to December 1981 blood specimens were taken from all homosexual men attending the clinic at the Bristol Royal Infirmary. Hepatitis B surface

antigen (HBsAg) was detected by reverse passive haemagglutination and confirmed by immune electron microscopy. All HBsAg positive patients were followed up and had serology and liver function tests assessed serially. Patients showing HBsAg positive results for six months or more were defined as having chronic hepatitis B virus (HBV) infection and tested for hepatitis B e antigen (HBeAg) and anti-hepatitis B e antibody (anti-HBe) by radioimmunoassay at the virus reference laboratory, Central Public Health Laboratory, Colindale. Patients with chronic HBV infection and abnormal liver function tests were referred to the medical unit.

Altogether 599 homosexual men were tested for HBsAg on 748 occasions. Eighteen (3.0%) men were found to be HBsAg positive once or more. All these men were British caucasian, as were 97% of the group. Five patients had signs and symptoms of acute hepatitis, four caused by hepatitis B virus (HBV) and one by hepatitis A virus.

Fourteen of the 594 (2.4%) patients without jaundice were found to be HBsAg positive on screening; all except one were followed up for a two year period. Ten (71%) of these patients with chronic HBV infection were HBeAg positive and anti-HBe negative while four (29%) possessed anti-HBe and were HBeAg negative. Ten of these patients had abnormal liver function tests and five of them had liver biopsies performed at this hospital. One of the biopsies showed chronic active hepatitis and the other four chronic persistent hepatitis.

The notes of all patients screened in the study were carefully examined for previous diagnoses of syphilis or gonorrhoea. Nine of 18 HBsAg positive patients had a history of syphilis compared with 136 of 581 HBsAg negative patients. In our group there was a significant correlation ($p < 0.05$) between confirmed HBV infection and a past history of syphilis.

The incidence of HBV infection in this group of homosexual men studied in Bristol was broadly comparable with data from central London.^{1,2} This contrasts with a report from Sheffield³ where an incidence of 0.1% was found. We were interested to observe symptomatic acute hepatitis B with readily detectable clinical signs in four patients. Some authorities have found overt clinical hepatitis to be uncommon in homosexual men.⁴ A high proportion of men with chronic HBV infection were HBeAg positive and therefore highly infectious. We consider our data reinforce the need for